





PAGER Version 4

10,000

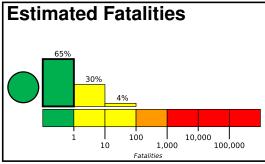
100,000

1,000

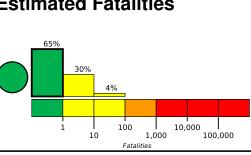
Created: 3 weeks, 5 days after earthquake

M 6.0, 261 km N of Tobelo, Indonesia

Origin Time: 2021-12-04 23:47:55 UTC (Sun 08:47:55 local) Location: 4.0932° N 128.1359° E Depth: 149.0 km



and economic losses. There is a low likeli-



Green alert for shaking-related fatalities Estimated Economic Losses hood of casualties and damage.

Estimated Population Exposed to Earthquake Shaking

EXPOSURE (k=x1000)		_*	467k*	69k	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	11-111	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

^{*}Estimated exposure only includes population within the map area.

Mangarang

Population Exposure

Pondaguitar 27.0° E

4.2 ° N

2.9°N

population per 1 sq. km from Landscan 5000 10000

130.0°E



Overall, the population in this region resides in structures that are a mix of vulnerable and earthquake resistant construction. The predominant vulnerable building types are unknown/miscellaneous types and heavy wood frame construction.

128.5°E

Historical Earthquakes

Date	Dist.	Mag.	Max	Shaking	
(UTC)	(km)		MMI(#)	Deaths	
2007-01-21	386	7.5	VI(283k)	3	
2003-05-26	211	6.9	VIII(10k)	1	
1994-01-21	341	6.9	IX(28k)	7	

Selected City Exposure

from GeoNames.org		
MMI	City	
IV	Rainis	
Ш	Essang	
Ш	Beo	
Ш	Mangarang	
Ш	Lirung	
Ш	Daruba	
Ш	Tobelo	
Ш	Pondaguitan	
Ш	Surup	

Tiblawan bold cities appear on map.

Nangan

Ш

Ш

120

(k = x1000)

3k

Population

<1k<1k

<1k<1k<1k10k 2k

Tobelo PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

https://earthquake.usgs.gov/earthquakes/eventpage/us6000g944#pager

Event ID: us6000g944